

REMARKS

35 U.S.C. § 102 and § 103

The Examiner has rejected claims 1-5 and 19-26 under 35 U.S.C. § 102(b) as being anticipated by Mori. Since claim 19 depends from claim 18, Applicant will assume that the Examiner intended to include claim 18. Claims 1 and 18 have been amended, and are not anticipated by Mori.

In Mori, Figure 3 illustrates flow when viewed from the front. Some of the flow is off-center with respect to a center axis of the semiconductor substrate 107. For example, one arrow strikes the substrate 107 at a location which is to the right of a center line of the substrate 107. That arrow is in a plane of the paper so that, when viewed from the right, the arrow would be normal to the substrate 107. Therefore, the arrow, when viewed from the right, would not be at an angle relative to the substrate 107.

Claim 1 has been amended to include the limitation that the liquid is directed from an outlet which, when viewed from the front, is off-center from a central axis of the substrate and, when viewed from the right, is at an angle other than normal to the surface of the substrate. Claim 1 is not anticipated by Mori, because Mori does not disclose flow which, when viewed from the front, is off-center with respect to a central axis of a substrate and, when viewed from the right, is at an angle relative to the substrate.

Claim 18 includes limitations which are similar to the limitations introduced into claim 1, and should be allowable for at least the same reasons. Claims 4-5 and

19-26 are dependent claims from either claim 1 or claim 18.

The Examiner also rejected claims 27-33 under 35 U.S.C. § 103(a) as being unpatentable over Mori. These claims are dependent claims of claim 1.

The Examiner also rejected claims 1, 3, 4, and 18-20 under 35 U.S.C. § 102(b) as being anticipated by Kobayashi. Kobayashi in Figure 2 illustrates flow flowing out of jetting ports 24. The flow is indicated by an arrow which strikes a surface of a workpiece 8 off-center with respect to a center line of the workpiece 8. That arrow is in a plane of the paper and, when viewed from above, would be normal to a plane of the workpiece 8. Claims 1 and 18 are thus not anticipated by Kobayashi for the same reasons as Mori. Claims 3, 4, and 19-20 depend from either claim 1 or claim 18.

The Examiner also rejected claims 21-33 under 35 U.S.C. § 103(a) as being unpatentable over Kobayashi. These claims depend from either claim 1 or claim 18.

The Examiner also rejected claims 1 and 27-33 under 35 U.S.C. § 103(a) as being unpatentable over Tomoeda. In Figure 7, water is directed out of injection nozzles 160. In the view of Figure 7, the water strikes a substrate G off-center with respect to a center line of the substrate G. Again, water flows in a plane of the paper and, when viewed from the right, strikes the substrate G in a direction

normal to its plane. Claim 1 is thus not anticipated by Tomoeda for the same reasons as Mori. Claims 27-33 depend from claim 1.

The Examiner also rejected claims 1, 3-5, 18, 19, 22-27, and 29-33 under 35 U.S.C. § 103(a) as being unpatentable over Arken. The same reasoning applies. One of the openings 130 is shown in Figure 3. Although off-center, the respective opening is not also at an angle. Claims 1 and 18 are thus not unpatentable over Arken for the same reasons as Mori. Claims 3-5, 19, 22-27, and 29-33 depend from either claim 1 or 18.

The Examiner also rejected claim 2 under 35 U.S.C. § 103(a) as being unpatentable over Arken, and in view of Mori. Claim 2 depends from claim 1.

Applicant, accordingly, respectfully requests withdrawal of the 35 U.S.C. § 102(b) and 103(a) rejections of the claims.

35 U.S.C. § 112

The Examiner also rejected claims 1-5 and 18-33 under 35 U.S.C. § 112, second paragraph, as being indefinite. The Examiner argues that the claim "an angle" includes angles extending from essentially 0° to 180°. Applicant has further defined the relative angle as being other than normal to the surface. Applicant submits that the amendment overcomes the Examiner's rejection in this regard.

The Examiner also stated that claim 1 incorrectly includes the word "in."
This word has been removed.

Applicant, accordingly, respectfully requests withdrawal of the rejections of claims 1-5 and 18-33 under 35 U.S.C. § 112, second paragraph, as being indefinite.

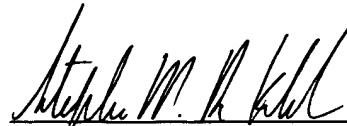
Applicant respectfully submits that the present application is in condition for allowance. If the Examiner believes a telephone conference would expedite or assist in the allowance of the present application, the Examiner is invited to call Stephen M. De Klerk at (408) 720-8300.

Please charge any shortages and credit any overages to Deposit Account No. 02-2666. Any necessary extension of time for response not already requested is hereby requested. Please charge any corresponding fee to Deposit Account No. 02-2666.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Date: January 30, 2002



Stephen M. De Klerk
Reg. No. 46,503

12400 Wilshire Boulevard
Seventh Floor
Los Angeles, California 90025-1026
(408) 720-8300

VERSION OF AMENDED CLAIMS WITH MARKINGS TO SHOW CHANGES

IN THE CLAIMS

1. (Three Times Amended) A method of applying a material onto a substrate surface, comprising:

exposing a surface of a substrate to a liquid, containing [in] a material, in an enclosure; and

directing more of the liquid from an outlet which, when viewed from the front, is off-center from a central axis of the substrate normal to the surface, and, when viewed from the right, is at an angle other than normal to the surface so that the liquid flows rotationally over the surface about the central axis, the material depositing on the surface.

18. (Three Times Amended) A method of electroplating a material onto a substrate surface within an enclosed chamber, comprising:

securing a substrate within an opening in a chamber so that a surface of the substrate faces an interior of the chamber;

coupling a cathode to the substrate;

introducing an electrochemical liquid into the chamber through an outlet which, when viewed from the front, is off-center from a central axis of the substrate normal to the surface, and, when viewed from the right, is at an angle

other than normal to the surface so that the liquid flows rotationally over the surface about the central axis, material plating out of the liquid onto the surface.